

IN THE CLAIMS

This listing of claims replaces all prior listings and versions of the claims in the present application.

Listing of Claims:

Claim 1 (Currently Amended): A surface pressure applying device for a slide valve that includes ~~comprises~~: a housing [(1)] fixed to a bottom surface of a molten metal vessel [(2)]; a clamp [(3)] supportedly provided to the housing [(1)] in a manner that allows the clamp [(3)] to open and close; and a slide case [(5)] housed movably within the clamp [(3)] and connected to plate driving means [(4)], the housing [(1)], the clamp [(3)], and the slide case [(5)] forming a space [(6)] in which at least two plate bricks ~~(a first plate brick (7) and a second plate brick (8))~~ are installed, the plate driving means [(4)] causing one of the plate bricks [(7, 8)] to slide to change an opening of each of nozzle holes [(7a, 8a)] formed in the plate bricks [(7, 8)], respectively, and control the outflow of molten metal, which comprises:

~~characterized by comprising~~: a pair of spring holders [(12)]; surface pressure releasing plates [(13)] with projections [(14)]; and a surface pressure releasing bar [(15)] with a wedge portion [(16)], the spring holders [(12)] each containing plural compression springs [(11)] and flanking the housing [(1)] in a direction parallel with a direction in which the slide case [(5)] slides, the surface pressure releasing plates [(13)] being placed under the spring holders [(12)] in a manner that allows the surface pressure releasing plates [(13)] to move up and down integrally with the spring holders [(12)], the surface pressure releasing bar [(15)] being placed between the housing [(1)] and the surface pressure releasing plates [(13)], the wedge portion [(16)] being tapered on a slide contact surface on which the wedge portion [(16)] is in slidable contact with the projections [(14)] of the surface pressure releasing plates [(13)], the projections [(14)] and the compression springs

[[11]] being arranged such that an arrangement center [[(A)]] of peaks of the projections [[14]] coincides with an arrangement center [[(B)]] of the compression springs [[11]], and ~~characterized in that~~ wherein the surface pressure releasing bar [[15]] is slid while connected to the plate driving means [[4]] by a connecting pin [[22]], to lift or depress the surface pressure releasing plates [[13]] and thereby release or apply surface pressure, the spring holders [[12]] being equipped with surface pressure applying hooks [[20]] for engaging with the clamp [[3]] when the surface pressure is applied and disengaging from the clamp [[3]] when the surface pressure is released.

Claim 2 (Currently Amended): The surface pressure applying device for a slide valve according to Claim 1, ~~characterized in that~~ wherein the projections [[14]] comprise rollers.

Claim 3 (Currently Amended): The surface pressure applying device for a slide valve according to Claim 1, ~~or 2, characterized by~~ further comprising upper rollers [[30]] provided on a lower surface of the housing [[1]] in opposition to the projections [[14]] in a manner in which the upper rollers [[30]] is in slidable contact with the surface pressure releasing bar [[15]].

Claim 4 (Currently Amended): The surface pressure applying device for a slide valve according to ~~any one of Claims 1 through 3, characterized in that~~ Claim 1, wherein the plate driving means [[4]] is connected to the surface pressure releasing bar [[15]] through the connecting pin [[22]] which is detachable.